CSS3 WORKSHOP

FRONTEND MASTERS

Christopher Schmitt
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WHO AM I?

- Web design specialist, trainer
- Organize online & offline Web design conferences
- Author of *Designing CSS Web Pages*
- Author of *CSS Cookbook, 3rd Edition*
- http://ChristopherSchmitt.com

TODAY'S **AGENDA**

- **What is CSS3?**
- **Explore new CSS3 selectors, properties**
  - **(and some other things, too)**
- **How to make them cross-browser, when possible**
- **Tinker with CSS3 examples on our own**
- **Look at resources to help include CSS3 into your designs**

WHAT IS CSS3?

CSS: Current Work

http://www.w3.org/Style/CSS/current-work

Activities • Tech. reports • Site index • Translations • Software • Search • Nearby: • Style • Blog • Syndicator • CSS •

Local links

What's new?

Contributing

Test suites

non-CSS

Profiles

About the colors

Blog

Cascading Style Sheets Current Work

~50 CSS3 Modules

This p
Sheets
develo
according to their priority within the working group. (See explanation.)

High Priority	Current	Upcoming
CSS Level 2 Revision 1	Candidate Recommendation	Proposed Recommendation
Selectors	Proposed Recommendation	Recommendation
CSS Mobile Profile 2.0	Candidate Recommendation	Proposed Recommendation
CSS Marquee	Candidate Recommendation	Proposed Recommendation
Medium Priority	**Current**	**Upcoming**
CSS Snapshot 2007	Last Call	Candidate Recommendation
CSS Namespaces	Candidate Recommendation	Proposed Recommendation
CSS Paged Media	Last Call	Last Call
CSS Print Profile	Last Call	Candidate Recommendation
CSS Values and Units	Working Draft	Working Draft

http://www.w3.org/Style/CSS/current-work#CSS3

WHERE IS CSS3 COMING?

- **The specification is divided into different chunks, modules**
  - **http://www.w3.org/Style/CSS/current-work**
    - **Transformations**
    - **Animations**
    - **Media Queries**
    - **and so on, and so on...**
    - **at a glacial pace ever towards yesterday**

WHERE IS CSS3 COMING?

- **The specification is divided into different chunks, modules**
  - **http://www.w3.org/Style/CSS/current-work**
- **The specification is being written by W3C**
  - **http://www.w3.org/Style/CSS/**

WHERE IS CSS3 COMING?

- **The specification is divided into different chunks, modules**
  - **http://www.w3.org/Style/CSS/current-work**
- **The specification is being written by W3C**
  - **http://www.w3.org/Style/CSS/**
- **Browser vendors (like Firefox, Safari, and Opera) are implementing their own versions of these unfinished standards**
  - **IE9 is "bringing the power of PC hardware and Windows"**

EXPLORING CSS3 (AND STUFF)

COLOR

COLOR: OPACITY ON BACKGROUND COLORS (RGBA)

CSS3 Opacity

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OPACITY

```
#number4 {
 background-color: rgba(255, 255, 0, .4);
}
```

OPACITY

```
#number4 {
 background-color: rgb(255, 255, 0);
 background-color: rgba(255, 255, 0, .4);
}
```

LESSONS LEARNED

- **Firefox 3+, Opera 10+, IE9+, and Safari support RGBA**
- **Requires another background-color property for cross-browser support.**
- **IE Support?**

OPACITY IN IE

```
#number4 {
 background-color: transparent;
filter:progid:DXImageTransform.Microsoft.gr
adient(
  startColorstr=#66FFFF00,
  endColorstr=#66FFFF00
   );
}
```

OPACITY IN IE

- **First step is to convert the RGB value of the color to hexadecimal. In this example, rgb(255,255,0) converts to #FFFF00.**

- **Next, convert the alpha transparency value to hexadecimal string . In this example, the value is 66.**

  - **E.g., alpha value of .3 equals 4D in hexadecimal values**

- **Then assemble the hexadecimal value for transparency and the color together in one string, starting with the transparency: #66FFFF00.**

OPACITY ON ELEMENTS

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OPACITY ON ELEMENTS

```
#number4 {
  opacity: .4; /* .4 = 40% transparency */
  filter: alpha(opacity=40);  /* 40 = 40%
transparency */
}
```

LESSONS LEARNED

- Supported in Firefox 1.5+, Opera 9+, Safari 1.2+ and Chrome.
- IE 5.5-8 requires the use of its own alpha filter in order for the effect to be cross-browser.
- A drawback to using the opacity filter is that the value is inherited:
  - If a parent element is set to be 10% transparent, the child elements' transparency is also going to be 10%.
  - Watch out for legibility issues within the Web page.

TEXT

TEXT-OVERFLOW

PNEUMONOULTRAMICROSCOPICSILICOVOLCANOCONIOSIS

The longest word in the Oxford English dictionary is used to name a lung disease caused by the inhalation of very fine silica dust, causing inflammation in the lungs.

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CSS Cookbook
Christopher Schmitt : Desig...
The doctor says I have Pneumonoultramicro… and I should buy a dictionary.
The doctor says I ha…

TEXT-OVERFLOW

```
p {
 text-overflow: ellipsis;
 -o-text-overflow: ellipsis;
}
```

LESSONS LEARNED

- Support:
  - Safari 3.2+
  - Opera 11+
  - Firefox 7+
  - and IE 6+

TEXT-SELECTION

The Lorem Ipsum & Dolor

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TEXT-SELECTION PSEUDO-ELEMENT

```
::selection {
 color: #90c;
 background: #cf0;
}
::-moz-selection {
 color: #90c;
 background: #cf0;
}
```

LESSONS LEARNED

- Support:
  - Safari 1.1+
  - Firefox 1.5+ (needs -moz-)
  - Opera 9.5+
  - IE9+
- Nice subtle effect, esp. if you deal with a lot of text on your site.

TEXT COLUMNS

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THE LOREM IPSUM & DOLOR

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Plu Sommun Paroles

Li Europan lingues es membres del sam familie. Lor separat existentie es un myth. Por scientie, musica, sport etc., li tot Europa usa li sam vocabularium. Li lingues differe solmen in li grammatica, li pronunciation e li plu commun vocabules. Omnicos directe al desirabilita de un nov lingua franca: on refusa continuar payar custosi traductores. It solmen va esser necessi far uniform grammatica, pronunciation e plu sommun paroles.

Copyright whatever

TEXT COLUMNS

```
<div id="column">
 <p>…<p>
 <h2>…</h2>
 <p>…<p>
 <h2>…</h2>
 <p>…<p>
</div>
```

TEXT COLUMNS

```
#column {
 -moz-column-gap: 3em;
 -moz-column-width: 11em;
 -webkit-column-gap: 3em;
 -webkit-column-width: 11em;
 padding: 10px;
}
```

TEXT COLUMNS

```
#column {
 -moz-column-gap: 3em;
 -moz-column-width: 11em;
 -moz-column-rule: 1px solid #ccc;
 -webkit-column-gap: 3em;
 -webkit-column-width: 11em;
 -webkit-column-rule: 1px solid #ccc;
 padding: 10px;
}
```

LESSONS LEARNED

- Works in Opera 11+, Safari, IE 10,
- Proprietary CSS extensions in Firefox and Safari.
- JavaScript solution through a jQuery plugin: http://welcome.totheinter.net/2008/07/22/multi-column-layout-with-css-and-jquery/

@FONT-FACE

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The Lorem Ipsum & Dolor

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Plu Sommun Paroles

FONT FILE SUPPORT

	.ttf	.otf	.eot
Safari 3.1+	Y	Y	
Opera 10+	Y	Y	
Firefox 3.5+	Y	Y	
IE4+			Y

@FONT-FACE

```
@font-face {
 font-family: 'MyFontFamily';
 src: url('myfont-webfont.eot'); /* IE9 Compat Modes */
 src: url('myfont-webfont.eot?iefix') format('eot'), /* IE6-IE8 */
 url('myfont-webfont.woff') format('woff'), /* Modern Browsers */
 url('myfont-webfont.ttf')  format('truetype'), /* Safari, Android,
iOS */
 url('myfont-webfont.svg#svgFontName') format('svg'); /* Legacy
iOS */
     }
h1 {
 font-family: “MyFontFamily”, Verdana, sans-serif;
}
```

http://paulirish.com/2009/bulletproof-font-face-implementation-syntax/

LESSONS LEARNED

- Getting @font-face to work is a little tough.
  - Use http://fontsquirrel.com for pre-made kits, @font-face generator
- Chrome supports @font-face
- Don't feel like bothering with all that hassle?
  - Use font services like typekit.com for 100s of licensed fonts.
  - Use commercially free fonts (see http://fontsquirrel.com)

LESSONS LEARNED

- Font files are LARGE
  - gzip them, if you use them: http://articles.sitepoint.com/article/web-site-optimization-steps/2
- New font file format: WOFF: http://hacks.mozilla.org/2009/10/woff/
  - Font files are already compressed and supports meta information telling where the font came from. (Vendors happy.)
  - It's supported FF3.6+, IE9+, Chrome 5+, Safari 5.1+

OH? YOU WANT *"ITALICS"*?

```
@font-face {
 font-family: 'MyFontFamilyItalic';
 src: url('myfont-webfont-italic.eot'); /* IE9 Compat Modes */
 src: url('myfont-webfont-italic.eot?iefix') format('eot'), /* IE6-IE8 */
 url('myfont-webfont-italic.woff') format('woff'), /* Modern Browsers */
 url('myfont-webfont-italic.ttf')  format('truetype'), /* Safari, Android, iOS */
 url('myfont-webfont-italic.svg#svgFontName') format('svg'); /* Legacy iOS
*/
    }
```

http://www.fontspring.com/blog/further-hardening-of-the-bulletproof-syntax

TEXT-SHADOW

A Good Sleepy is a Good Thing Indeed

I had to wake up early for the dentist appointment this morning. Why is it that on the day I have to wake up really early it i
with a good sleep? I had the blankets right where they were the most comfortable, too.

If that ever happens, our society should allow you to tell the other person you were late because you realized you in the mid
good sleepy". It's the positive version of "I was in a car accident."

Try the phrase out, see how it works and report back to me.

TEXT-SHADOW

```
h1 {
 font-size: 2.5em;
 font-family: Myriad, Helvetica, Arial, sans-serif;
 width: 66.6%;
 text-shadow: yellow .15em .15em .15em;
 margin: 0 0 0.1em 0;
}
```

The Lorem Ipsum & Dolor

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ut aliquip ex ea commodo consequat. Duis autem vel eum iriure dolor in hendrerit in vulputate
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nolo contendre. Gratuitous octopus niacin, sodium glutimate. Quote meon an estimate et non i
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incongruous feline nolo contendre Olypian quarrels et gorilla congolium sic ad nauseum. Souv
pluribus unum.

BEVEL TEXT-SHADOW

```
body {
 background-color: #999;
}
h1 {
 text-shadow: 0 1px 0 rgba(255,255,255,.6);
}
```

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The Lorem Ipsum & Dolor

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TEXT-SHADOW FLAME

```
h1 {
 color: red;
 text-shadow: rgba(0, 0, 0, .9) 0px 0px 1px,
  rgba(255, 255, 51, .9) 0px −5px 5px,
  rgba(255, 204, 51, .7) 2px −10px 7px,
  rgba(255, 153, 0, .6) −2px −15px 10px;
}
```

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SOLAR TEXT-SHADOW

```
body {
    background-color: #dcaa96; /* not white */
    background-image: url(tile.jpg);
}
h1 {
 color: white;
 text-shadow: black 0px 0px 6px;
}
```

BORDERS

BOX-SHADOW

SHY URL

HUMILIATE LONG LINKS

BOX-SHADOW

```
#header {
text-shadow: 0 −1px 0 rgba(0,0,0,.8);
box-shadow: 3px 3px 19px rgba(0,0,0,.8);
-webkit-box-shadow: 3px 3px 19px rgba(0,0,0,.8);
-moz-box-shadow: 3px 3px 19px rgba(0,0,0,.8);
}
```

BORDER-IMAGE

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Images on Borders
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BORDER-IMAGE

```
<div id="section">
<h2>Images on Borders</h2>
<p>Epsum factorial non deposit quid pro quo hic escorol.
Olypian quarrels et
gorilla congolium sic ad nauseum. Souvlaki ignitus
carborundum
e pluribus unum..</p>
</div><!-- /#section -->
```

BORDER-IMAGE

```
#section {
 border-style: solid;
 border-color: #930;
 border-width: 26px 39px 37px 43px;
 border-image: url(frame.png) 26 39 37 43 stretch stretch;
 -webkit-border-image: url(frame.png) 26 39 37 43 stretch
stretch;
 -moz-border-image: url(frame.png) 26 39 37 43 stretch
round;
}
```

LESSONS LEARNED

- Works in FF 3.1+ and Safari 4+, IE 10
- Image is scaled, if text is also scaled.

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SUBMIT

BORDER-IMAGE

```
<form action="/" method="get">
 <button>Submit</button>
</form>
```

BORDER-IMAGE

```
button {
background: none;
width: 250px;
padding: 10px 0 10px 0;
border-style: solid;
border-color: #666;
border-width: 0 17px 0 17px;
}
```

BORDER-IMAGE

```
button {
background: none;
width: 250px;
padding: 10px 0 10px 0;
border-style: solid;
border-color: #666;
border-width: 0 17px 0 17px;
border-image: url(bkgd-button.png);
}
```

BORDER-IMAGE

```
button {
background: none;
width: 250px;
padding: 10px 0 10px 0;
border-style: solid;
border-color: #666;
border-width: 0 17px 0 17px;
border-image: url(bkgd-button.png) 0 17 0 17 stretch stretch;
}
```

BORDER-IMAGE

```
button {
background: none;
width: 250px;
padding: 10px 0 10px 0;
border-style: solid;
border-color: #666;
border-width: 0 17px 0 17px;
border-image: url(bkgd-button.png) 0 17 0 17 stretch stretch;
-webkit-border-image: url(bkgd-button.png) 0 17 0 17 stretch stretch;
-moz-border-image: url(bkgd-button.png) 0 17 0 15 stretch stretch;
}
```

BORDER-IMAGE

```
button {
background: none;
width: 250px;
padding: 10px 0 10px 0;
border-style: solid;
border-color: #666;
border-width: 0 17px 0 17px;
border-image: url(bkgd-button.png) 0 17 0 17 stretch stretch;
-webkit-border-image: url(bkgd-button.png) 0 17 0 17 stretch stretch;
-moz-border-image: url(bkgd-button.png) 0 17 0 15 stretch stretch;
color: white;
font-family: "Gill Sans", Trebuchet, Calibri, sans-serif;
font-weight: bold;
text-transform: uppercase;
text-shadow: 0px 0px 5px rgba(0,0,0,.8);
}
```

LESSONS LEARNED

- Works in FF 3.1+ and Safari 4+, IE 10
- Image is scaled, if text is also scaled.
- **Other values besides “stretch” are “repeat” (tiles the image); “round”, which tiles and filled it with whole images; and “space”, which is like “round” except it leaves empty space**

BORDER-RADIUS

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BORDER-RADIUS

```
div {
background-image: url(beach.jpg);
width: 375px;
height: 500px;
border: 8px solid #666;
border-radius: 40px;
-moz-border-radius: 40px;
-webkit-border-radius: 40px;
}
```

BORDER-RADIUS

CSS3	Firefox	WebKit
border-radius	-moz-border-radius	-webkit-border-radius
border-top-left-radius	-moz-border-radius-topleft	-webkit-border-top-left-radius
border-top-right-radius	-moz-border-radius-topright	-webkit-border-top-right-radius
border-bottom-right-radius	-moz-border-radius-bottomright	-webkit-border-bottom-right-radius
border-bottom-left-radius	-moz-border-radius-bottomleft	-webkit-border-bottom-left-radius

LESSONS LEARNED

- Radius is half the distance of the diameter. (Stay in school, kids!)
- Radius border can be applied to one, two, three or all corners.
- The higher the value for the radius, the more rounded the corner will be.
- If borders on an inline image (IMG element) are rather large, borders are shown behind the image (see previous screenshot).
  - Workaround is to either keep border-radius value small or place image in background.

EFFECTS

IMAGE MASKS

mugshots_master.psd @ 100% (Layer 2...
100%

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IMAGE MASKS

```
img {
display: block;
float: left;
margin-right:20px;
border: 10px solid #ccc;
padding: 2px;
background-color: #666;
-webkit-mask-box-image: url(mask.png);
}
```

LESSONS LEARNED

- When creating a mask, every part of the image that is transparent becomes the mask or the part that hides a portion of the background image.
  - Approach is somewhat hard to understand, since typically, alpha transparency is, well, transparent.
- The masks scale to the complete width of image, including borders.
- The background shows through, including background images.
  - Might work best with areas of flat color behind the images

GRADIENTS

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GRADIENTS

```
div.building {
border: 1px solid #666;
float: left;
width: 300px;
height: 300px;
margin: 20px;
background-image:
    -webkit-gradient(radial,center center,900,center
    bottom,0,from(#0cf),to(white));
background-image:
    -moz-radial-gradient(center,900px,center
    bottom,0,from(#0cf),to(white));
background-repeat: no-repeat;
}
```

SAFARI GRADIENTS

```
background-image:
    -webkit-gradient();
```

Recommend using background-image over background shorthand.

SAFARI GRADIENTS

```
background-image:
    -webkit-gradient(radial);
```

Other value it accepts is linear.

SAFARI GRADIENTS

```
background-image:
   -webkit-gradient(radial,center center,900);
```

Set the starting position of gradient.

SAFARI GRADIENTS

```
background-image:
   -webkit-gradient(radial,center center,900,center
   bottom,0);
```

Set the end position of gradient.

SAFARI GRADIENTS

```
background-image:
   -webkit-gradient(radial,center center,900,center
   bottom,0,from(#0cf),to(white));
```

Set the starting and stopping colors.

LESSONS LEARNED

- Gradients in Safari can be applied to not just background images of block-level elements, but also:
  - list bullets, generated content, and border-images!
- Unit values aren't accepted (px, em, etc.) It's assumed to be pixels.
- Don't use background-position shorthand values.
- Use a background-image with a gradient for "older" browsers.

FIREFOX GRADIENTS

- Whereas Safari sets the type of gradient within its own proprietary property, Firefox has properties for both types of gradients: -moz-radial-gradient() and -moz-radiallinear().
- Unlike the Safari gradient, you can use background-position shorthand values *and* unit values when setting the starting and stopping points of gradients.
- Firefox's implementation of CSS gradients concerns transparency.

FIREFOX GRADIENTS

background-image: -moz-linear-gradient(left top, left bottom, from(**rgba(153,51,0,.3)**), to(#6b3703), color-stop(0.5, #903000));

Ultimate CSS Gradient Generator - ColorZilla.com

http://colorzilla.com/gradient-editor/

Ultimate CSS Gradient Generator ...

Ultimate CSS Gradient Generator

A powerful Photoshop-like CSS gradient editor from ColorZilla.

Presets

Name: Blue Gloss Default new

Stops

Color: Location: % delete

News: version 2 is here - see what's new.

Preview

Orientation: horizontal Size: 350 x 50 IE

CSS

```
background: rgb(30,87,153); /* old browsers */

background: -moz-linear-gradient(left,
   rgba(30,87,153,1) 0%, rgba(41,137,216,1) 50%,
   rgba(32,124,202,1) 51%, rgba(125,185,232,1)
   100%); /* firefox */

background: -webkit-gradient(linear, left top,
   right top, color-stop(0%,rgba(30,87,153,1)),
   color-stop(50%,rgba(41,137,216,1)), color-
   stop(51%,rgba(32,124,202,1)), color-
   stop(100%,rgba(125,185,232,1))); /* webkit */

filter: progid:DXImageTransform.Microsoft.gradient(
   startColorstr='#1E5799',
   endColorstr='#7db9e8',GradientType=1 ); /* ie */

background: -o-linear-gradient(left,
   rgba(30,87,153,1) 0%,rgba(41,137,216,1)
   50%,rgba(32,124,202,1) 51%,rgba(125,185,232,1)
   100%); /* opera */
```

n CSS

http://colorzilla.com/gradient-editor/

Share

Tweet 163 Like 1K

http://lea.verou.me/css3patterns/

GRADIENT MASKS

CSS Cookbook
file:///Users/christopher/Documents/Work/CSS%20COokbook%203/Frames/NewHT
Google
CSS Cookbook
CSS Cookbook
Technology Books, Tech Conferen...

GRADIENT MASKS

```
img {
display: block;
float: left;
margin-right:20px;
border: 10px solid #ccc;
padding: 2px;
background-color: #666;
-webkit-mask-box-image:
    -webkit-gradient(linear, left bottom, left top,
from(rgba(0,0,0,1)), to(rgba(0,0,0,0)));
}
```

Only works in Safari.

Example of transparent gradients, border image, PNG8, text-shadow, box-shadow

TRANSFORM & ANIMATE

TRANSFORM

Background-Size
Reload
Stop
Home
Print
1Password
file:///Users/christopher/Documents/Work/O'R
Background-Size
Christopher Schmitt : Designer,...
Technology Books, Tech Confer...

TRANSFORM

```
img+img {
 transform: rotate(270deg);
 -webkit-transform: rotate(270deg);
 -moz-transform: rotate(270deg);
 filter: progid:DXImageTransform.Microsoft.BasicImage(rotation=3);
}
```

TRANSFORM <IE9 CONVERSION

Degree Rotation	BasicImage filter value
0	**0**
90	**1**
180	**2**
270	**3**

ANIMATING LINKS

CSS Cookbook

Site navigation:

- Home
- About
- Archives
- Writing
  - Releasing CSS
  - CSS Cookbook
- Speaking
- Contact

Li Europan Lingues

Sed sed nisi. Morbi gravida, odio
posuere tortor elit eget est. Nulla li
ultricies quis, rutrum dignissim, fe

Go to "file:///writing/releasing-css"

CSS Cookbook

Site navigation:

- Home
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- Archives
- Writing
  - Releasing CSS
  - CSS Cookbook
- Speaking
- Contact

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posuere tortor elit eget est. Nulla li
ultricies quis, rutrum dignissim, fe

Go to "file:///writing/"

Site navigation:

- Home
- About
- Archives
- Writing
  - Re
  - CS
- Speaking
- Contact

Li Europa

Sed sed nisi. M
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ultricies quis, ru

Go to "file:///archiv

ANIMATING LINKS

```
#navsite a {
 -webkit-transition-timing-function: linear;
 -webkit-transition-duration: .66s;
 -webkit-transition-property: background-color;
}
```

Style rollover links normally.

LESSONS LEARNED

- **The transitioning-timing-function function states the type of animation the effect is going to take.**
  - **In this example, the value is set to linear, which means each frame of the animation length takes the same amount of time.**
  - **Other values for transitioning-timing-function include ease, ease-in, ease-out, and cubic-bezier(x1, y1, x2, y2).**

[illegible]

[illegible]

1.0
0.5
Output Percentage
P_0
P_1
P_2
P_3
Input Percentage
0.5
1.0

cubic-bezier

cubic-bezier(x1, y1, x2, y2)

- **The first two values of cubic-bezier represent the transition on a curve, as shown in the figure.**
  - **Values for y1 and y2 represent the start and end of the transition and are always equal to the values of 0.0 and 1.0, respectively.**
  - **The speed with which the transition takes hold is represented by the values x1 and x2. The greater the value for x1 and x2, the slower the transition occurs.**

CUBIC BEZIER CURVE

- **A value of ease-in starts the transition at a slow speed and then speeds up. This value is equivalent to cubic-bezier(0.42, 0, 1.0, 1).**
- **The ease-out value starts the transition at a fast speed and then slows down. This value is equivalent to cubic-bezier(0.42, 0, 1.0, 1).**
- **The ease value is equivalent to cubic-bezier(0.25, 0.1, 0.25, 1.0).**

DURATION & DELAY

- **The *transition-duration* property's default value is 0.**
  - **Any negative value is treated as though it's zero.**
  - **Units the value may take include, but are not limited to, "s" for seconds and "ms" for milliseconds.**
- **The *transition-delay* property sets the amount of time before a transition starts.**

TRANSITION PROPERTY

- **The *transition-property* property defines which CSS visual property the transition is applied to.**
  - **In the animated link example, the transition is applied to the background color.**

SHORTHAND PROPERTY

- **You can write the properties of the transition effect in one value for the transition property:**

```
#navsite a {
 -webkit-transition: background-color .66s linear;
}
```

Ceaser – CSS Easing Animation Tool – Matthew Lein

http://matthewlein.com/ceaser/

Ceaser – CSS Easing Animation T...

Ceaser CSS EASING ANIMATION TOOL

Tweet

1. Choose an easing type and test it out with a few effects.
2. If you don't quite like the easing, grab a handle and fix it.
3. When you're happy, snag your code and off you go.

Now that we can use CSS transitions in all the modern browsers, let's make them pretty. I love the classic Penner equations with Flash and jQuery, so I included most of those. If you're anything like me*, you probably thought this about the default easing options: "ease-in, ease-out...yawn." The mysterious cubic-bezier has a lot of potential, but was cumbersome to use. Until now.
Also, touch-device friendly!

*If you *are* anything like me, we should be friends @matthewlein

Easing: custom (drag the handles)

Duration: 1000

Effect: Left Width Height Opacity

http://matthewlein.com/ceaser/

Code snippets, short and long-hand:

```
-webkit-transition: all 1000ms cubic-bezier(0.735, 0.235, 0.165, 1.000);
   -moz-transition: all 1000ms cubic-bezier(0.735, 0.235, 0.165, 1.000);
     -o-transition: all 1000ms cubic-bezier(0.735, 0.235, 0.165, 1.000);
        transition: all 1000ms cubic-bezier(0.735, 0.235, 0.165, 1.000); /* custom */
```

COMPLEX ANIMATING LINKS

Google
RSS
com/photos/kurafire
e photos I take
r.com/kurafire
p with what I'm doing
.com/kurafire
ts of my life in 24 fps
in.com/in/kurafire
siness connections
ook.com/farukates

COMPLEX ANIMATED LINKS

- Web designer Faruk Ateş's personal site (see http://farukat.es/) uses the *transition* property to change the color of the element.
  - As well as the color, width, box shadow, text shadow, *and* opacity.

COMPLEX ANIMATED LINKS

```
#web20 li a {
 text-shadow: rgba(0,0,0, 0) 1px 1px 2px;
-moz-box-shadow: rgba(0,0,0, 0) 2px 2px 2px;
-webkit-box-shadow: rgba(0,0,0, 0) 2px 2px 2px;
-moz-border-radius-topright: 31px;
-moz-border-radius-bottomright: 31px;
-webkit-border-top-right-radius: 31px;
-webkit-border-bottom-right-radius: 31px;
-webkit-transition: background-color .25s ease,
  color .5s ease,
  width .2s ease-out,
  -webkit-box-shadow .25s ease,
  text-shadow .2s ease,
  opacity .2s ease;
}
```

ANIMATING ELEMENTS

CSS Cookbook
file:///Users/christopher/Pictures/cloud%20anim
Google
Bookmarketlets
In Control Conference
CSS Prism
ChoiceTweets
Twitshirt This!
CSS Cookbook
Christopher Schmitt : Desig...
Technology Books, Tech Co...
Birds
of a
Feather
http://www.flickr.com/photos/mikebaird/665300179/
http://www.flickr.com/photos/13521837@N00/2256217996/
http://www.flickr.com/photos/vinayshivakumar/3194015535/

CSS Cookbook
file:///Users/christopher/Pictures/cloud%20anim
Google
Bookmarketlets
In Control Conference
CSS Prism
ChoiceTweets
Twitshirt This!
CSS Cookbook
Christopher Schmitt : Desig...
Technology Books, Tech Co...
Birds
of a
Feather
http://www.flickr.com/photos/mikebaird/665300179/
http://www.flickr.com/photos/13521837@N00/2256217996/
http://www.flickr.com/photos/vinayshivakumar/3194015535/
Li Europan linguas es membres del sam familie. Lor separat existentie es un myth. Por scientie, musica, sport etc., li tot Europa usa li sam vocabularium. Li linguas differe solmen in li grammatica, li pronunciation e li plu commun vocabules. Omnicos directe al desirabilitÃ¡ de un nov lingua franca: on

ANIMATING ELEMENTS

```
<body>
<div id="clouds1"></div>
[...]
</body>
```

ANIMATING ELEMENTS

```
#clouds1 {
 width: 627px;
 height: 410px;
 position: absolute;
 right: −300px;
 top: 0;
 background-image: url(clouds.png);
}
```

ANIMATING ELEMENTS

```
@-webkit-keyframes "clouds" {
 from {
  right: 0px;
 }
 to {
  right: 100px;
 }
}
```

ANIMATING ELEMENTS

```
#clouds1 {
 width: 627px;
 height: 410px;
 position: absolute;
 right: −300px;
 top: 0;
 background-image: url(clouds.png);
 -webkit-transform: translate(300px, 0px);
 -webkit-animation-name: "clouds";
 -webkit-animation-duration: 10s;
 -webkit-animation-iteration-count: 10;
 -webkit-animation-direction: alternate;
}
```

ANIMATING ELEMENTS

- **Animations can take on more than one property (think offset properties and even opacity for some interesting effects).**
- **The *animation-transform* property is used to associate which keyframe rule is used ("clouds).**
- **The *animation-duration* is set for how long the effect should occur. (Negative values are treated as zero.)**
- **The *animation-iteration-count* tells how many times it should happen. For constant looping, use value of "infinite".**
- **Use *animation-direction* property set to normal loops animation, while "alternate" creates a more seamless presentation (back and forth).**

RESOURCES

- **"When Can I Use..."**
  http://caniuse.com/

- **Modernizr**
  http://www.modernizr.com/

- ***CSS Cookbook, 3rd Edition***
  http://oreilly.com/catalog/9780596155940

- **CSS3 Sandbox**
  http://westciv.com/tools/gradients/

- **"10 Amazing Examples of Innovative CSS3 Animation"**
  http://designshack.co.uk/articles/css/10-amazing-examples-of-innovative-css3-animation

THANK YOU!

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http://en.wikipedia.org/wiki/File:Bridge_across_continents_iceland.jpg

http://en.wikipedia.org/wiki/File:Plates_tect2_en.svg